CALIFORNIA ENERGY COMMISSION
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SACRAMENTO, CA 95814-5512

March 4, 2002

Mr. Samuel Wehn, Project Director
Enron North America Corporation
Roseville Energy Facility, LLC
101 California Street, Suite 1950
San Francisco, CA 94111

Mr. Wehn:

ROSEVILLE ENERGY FACILITY (REF) DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified in the enclosed data requests. The information is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will be constructed and operated in a safe, efficient, and reliable manner, and 4) assess potential mitigation measures.

This set of data requests (#157 – 192) is being made in the areas of: Project Overview, Biological Resources, Land Use, Noise, Plant Efficiency, and Transmission System Engineering. Written responses to the enclosed data requests are due to the Energy Commission staff on or before April 4, 2002 or at such later date as may be mutually agreed.

If you are unable to provide the information requested, need additional time or object to providing the requested information, you must send a written notice to both Commissioner Robert Laurie, Presiding Member of the Committee for the REF proceeding, and to me, within 10 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time and the grounds for any objections (see Title 20, California Code of Regulations section 1716 (e)). Staff requests that the responses be sent together in one complete document rather than fragmented.

If you have any questions regarding the enclosed data requests, please contact me at (916) 653-1227 or e-mail lshaw@energy.state.ca.us.

Paul C Richard

for LANCE SHAW
Siting Project Manager

Enclosure:

cc: POS

PROOF OF SERVICE (REVISED _____) FILED WITH
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Evelyn M Johnson

Roseville Energy Facility
Data Requests
(01-AFC-14)

Technical Area: Project Overview
Author: Lance Shaw

BACKGROUND

In the AFC (Sections 1.2.3, 1.2.4, 3.4.7, 3.7.1), the applicant states that natural gas will be delivered to the REF through a 5-mile long 16- to 20-inch diameter pipeline from PG&E Line 123 at a pressure of between 100 and 200 psig, with supplemental compression required on-site. However, in Appendix U, there is a letter from Rodney Boschee, of PG&E to Samuel L. Wehn of Roseville Energy Facility, LLC, dated May 1, 2001. This letter refers to gas service for the power plant. The letter states that service to the REF from the nearest local transmission pipeline is expected to require a tap into the 12-inch Line 123, which is a 4 - to 6 mile transmission extension, and about 25 miles of reinforcement to the local transmission system, to provide natural gas at not less than Standard Delivery service pressure of 100-175 psig. The letter states that as an alternative to the above route, service from the next nearest local transmission pipeline would require a tap into a planned transmission extension from PG&E Line 172. The tap would require 10-13 miles of transmission extension and about 15 miles of reinforcement to the local transmission system to provide service at not less than Standard Delivery service pressure.

In a letter docketed on January 30, 2002, to Mr. Mark Fillinger, Director of Enron, from Rodney Boschee of PG&E, Subject, "Preliminary Application for Service System Impact Study – Roseville Energy Facility", it states, "On October 22, 2001, Roseville Energy Facility, L.L.C. (Applicant) requested Pacific Gas & Electric Company (PG&E) to include the follow three scenarios in its System Impact Study (SIS) for gas service to Applicant's proposed Roseville Energy Facility (Facility) to be located near the Pleasant Grove Wastewater Treatment Facility in Roseville, California:

A route to Line 172 assuming a portion of this line is permitted and built for the Rio Linda/Elverta project.
A route to Line 172 assuming the Rio Linda/Elverta project is not built.
A route to Line 123 ..."

The resulting linears for the first route is 41 miles, for the second is 41 miles, for the third is 35.5 miles.

DATA REQUEST

157. Please provide a map of the project site plus the natural gas linear facilities chosen for your project. Clearly show the scale on the map. Please show on the map, the location of schools public and private, as well as daycare centers. Please list the names of the schools and the school districts. This request includes those schools, for which a permit has been filed.

158. Please provide the final (non-preliminary) natural gas system impact study for the route selected.

159. If natural gas is to be provided to the project in a manner other than described in the AFC, and its supplements, provide AFC level of detail analysis in all appropriate technical areas (including biological and cultural surveys) for the new gas line.

160. Please include the update to the property owners' list for this any other new linears, which are different from the AFC and its supplements.

BACKGROUND

The Electrical System Impact Study Report Dated November 12, 2001, which was filed with the Energy Commission on January 25, 2002, states in its Executive Summary, "Roseville Energy Facility, L.L.C., (REF) has requested Western Area Power Administration (Western) to conduct a System Impact Study (SIS) to evaluate feasibility of interconnecting a 900 MW combined cycle generation project, called the Roseville Energy Facility, L.L.C., to Western's Roseville Substation in the northeast corner of Sacramento County. This plant is planned to be in operation in the first quarter of 2005."

It states, "The preliminary SIS results indicate that the REF provides additional reactive support which significantly increases the load serving capability with the Sacramento region. However, the proposed generation creates severe local thermal overloads under both normal and contingency conditions. The proposed interconnection is feasible **only if** (bolded in the report) the following transmission lines reconfiguration and upgrades are implemented as noted and shown in Figure 1 and listed below:"

DATA REQUEST

161. For each of the 10 transmission lines' reconfigurations and upgrades, please clearly show on a separate map for each (and for the electrical system impacts in total on a map), the project site plus the each of these electrical transmission facilities chosen for your project. Clearly show the scale on all of the maps. Please show on the maps, the location of schools public and private, as well as daycare centers. Please list the names of the schools and the school districts. This request includes those schools, which are in the planning stages to be built.

162. Please state whether or not this is your final system impact study. Is this the project, which you plan to build?

163. If the electrical transmission of the generated power is to be distributed to the electrical system(s) in a manner other than described in the AFC, and its

supplements, provide AFC level of detail analysis in all appropriate technical areas (including biological and cultural surveys) for the new electrical transmission lines.

164. Please include the update to the property owners' list for this any other new linears, which are different from the AFC and its supplements.

Technical Area: Biological Resources
Author: Stuart Itoga, Natasha Nelson

BACKGROUND

Although applicant has attempted to avoid or to minimize impacts to the Woodcreek Oaks vernal pool mitigation area, staff is concerned that construction activities, associated with upgrading transmission lines, will adversely impact vernal pools/swales and associated sensitive species in the Woodcreek Oaks mitigation area. Staff and the U. S Fish and Wildlife Service (USFWS) have advised applicant that construction activities within the Woodcreek Oaks mitigation area should be avoided, and any impact within this area, including use of existing access roads, would be considered an impact. Although impacts to the mitigation complex are expected to be indirect, the USFWS has indicated that the mitigation ratio required for impacts within the Woodcreek Oaks mitigation complex could be as great as nine to one. Staff and the USFWS previously requested that applicant provide alternative construction methods and a cost estimate for routing the transmission line underneath the Woodcreek Oaks complex. In data responses, dated December 20, 2001, applicant proposed some alternative construction methods and indicated that underground construction of transmission lines beneath the Woodcreek Oaks mitigation complex would not be feasible.

DATA REQUEST

165. Please indicate which of the proposed alternative construction methods will be used for the required transmission line upgrades within the Woodcreek Oaks mitigation area.

166. Please provide a cost estimate for routing the transmission line beneath the Woodcreek Oaks mitigation area.

167. Please update and resubmit table DR-41 (Summary of Potential Branchiopod Habitat Impacts) to reflect potential direct or indirect impacts (specifically towers 25-28 under the heading of Option 2, new conductor) within the Woodcreek Oaks mitigation area. Please submit the table in hard copy and electronic formats (e.g. as a spreadsheet).

BACKGROUND

The electrical transmission System Impact Study prepared by Western Area Power Administration (Western), states that the proposed interconnection is feasible only if several transmission lines are reconfigured or upgraded. Staff is concerned that construction associated with reconfiguring or upgrading transmission lines and facilities associated with the proposed project will adversely affect biological resources in the project area.

DATA REQUEST

168. Please provide a list of all transmission lines and facilities associated with the proposed project requiring reconfiguration and upgrades.

169. For each of the lines/facilities listed for 168 above, please describe the location, environmental setting, potential impacts, sensitive species/habitats and any applicable biological resource surveys and at what level each was conducted. Indicate species targeted and dates surveys were conducted.

170. Please provide a map, at a scale of 1:12000 depicting the location of the transmission lines and facilities described in 168 above. The map should indicate any biological resources within the corridor or 1,000 feet from the outer edge of the corridor.

BACKGROUND

Staff requested (Data Request # 39, November 20, 2001) that applicant analyze potential impacts to sensitive plants and habitats from stack emissions and cooling tower drift. Applicant's response, dated December 20, 2001, states: "field studies of agricultural crops on the more humid East Coast have shown that significant (ten percent) reduction of yield may occur when drift deposition salts are applied to salt sensitive species such as corn at deposition rates of about 10-12 kg/ha-mo (3-4 lb/ac-mo). In a dry climate, the threshold for plant damage or loss of yield is lower, one-third or less, or 3-4 kg/ha-mo. Staff appreciates applicant's response to its data request, but is concerned that the source of the data was not provided.

DATA REQUEST

171. Please provide the source(s) of the data referenced in the response to staff's data request # 39.

BACKGROUND

In the Application for Certification (AFC), Section 5.6.1.4, page 5.6-22, applicant indicated that additional surveys for late blooming rare plants would be conducted in late July 2001. In November 20, 2001 data requests, staff requested that applicant provide the results of the aforementioned surveys. In the December 20, 2001 data response, applicant stated that no special status plants were observed during surveys conducted in July 2001. Staff appreciates applicant's response to its data request but is concerned that the description of the plant surveys is not more detailed.

DATA REQUEST

172. Please provide a more detailed description of the plant surveys conducted in July 2001. Include the survey protocols, dates, locations and target species.

BACKGROUND

To compensate for the loss of annual grassland habitat, applicant has proposed mitigation based on a compensation ratio established by the California Department of Fish and Game (DFG) for Swainson's Hawk foraging habitat. Applicant has proposed to compensate by providing 0.75 acres for every acre developed. Staff appreciates applicant's compensation proposal for the loss of annual grassland habitat; however, the loss of annual grassland foraging habitat will affect, not only the Swainson's Hawk, but other birds as well. Grassland foraging bird species known from the area include: White-tailed kite (*Elanus leucurus*), Ferruginous hawk (*Buteo regalis*), Coopers hawk (*Accipiter cooperi*), Horned lark (*Eremophila alpestris*), Northern harrier (*Circus cyaneus*). Staff and the DFG are of the opinion that annual grasslands are important to a variety of wildlife, and numerous development projects in the area are contributing to a cumulative loss of wildlife habitat.

DATA REQUEST

173. Please provide a mitigation proposal for the loss of annual grassland habitat that addresses the importance of the habitat to wildlife and adequately addresses the project's contribution to cumulative loss of annual grasslands in the region.

BACKGROUND

During a January 28, 2002 workshop, applicant indicated that submittal of the U.S. Army Corp of Engineers (USACOE) 404 permit application would be delayed. Furthermore, although a draft Biological Assessment (BA) was submitted to the Western Area Power Administration (Western) and the USFWS, a revised BA, based on comments received by the aforementioned agencies, has not yet been submitted. In its December 20, 2001 data responses, applicant indicated that the revised draft BA would be submitted in January 2002. Staff has not yet seen the revised draft BA.

DATA REQUEST

174. Please provide an update on the status of the USACOE permit application.

175. Please provide an update on the status of the draft BA.

BACKGROUND

It is staff's understanding that applicant requested a System Impact Study (SIS) be conducted by PG&E for its gas pipeline. The applicant requested that three scenarios be included in the SIS: 1) A route to Line 172 assuming a portion of this line is permitted and built for the Rio Linda/Elverta project. 2) A route to Line 172 assuming the Rio Linda/Elverta project is not built. 3) A route to Line 123. The three scenarios evaluated in the SIS all involve construction of new gas pipelines of varying lengths and diameters. Staff requests clarification on which scenario will be implemented and how suspension of the Rio Linda project could affect feasibility of the three scenarios.

DATA REQUEST

176. Please indicate which gas pipeline route is proposed for the Roseville Energy Facility. Provide a description of the environmental setting along the proposed route including any sensitive habitats the pipeline may traverse. Include a list of sensitive species likely to occur along the proposed route, potential impacts, and the biological resources surveys conducted to date.

177. Please provide a map at a scale of 1:12000 depicting the pipeline route and the location of sensitive species/habitats along the proposed route. The map should indicate any biological resources within the corridor or 1000 feet from the outer edge of the corridor.

Technical Area: Power Plant Efficiency
Authors: Shahab Khoshmashrab and Steve Baker

BACKGROUND

Preliminary Application for Service System Impact Study, dated January 9, 2002, prepared by PG&E, provides three scenarios for delivering natural gas to the proposed Roseville Energy Facility, at requested pressures. According to this study, the order of these scenarios is based on PG&E's expected cost estimates to construct, the impact on the level of service available to surrounding non-core customers, and the expected impact on the cost of serving future load growth in the area.

DATA REQUEST

178. Does the applicant plan to implement the upgrades to the pipelines, as proposed in the PG&E study, in order to mitigate the adverse impacts on the local gas supplies? If not, what efforts will be taken to mitigate these impacts?

Technical Area: Land Use
Author: David Flores

BACKGROUND

In order to assess potential land use impacts, the California Department of Education in its letter of December 7, 2001 have indicated that the Roseville Joint Union High School District and Roseville City School District will serve school needs in this area. The Department of Education has indicated that within the area of the proposed power plant, six schools (i.e., four elementary, a middle school, and a high school) are in the preliminary or conceptual planning phases by the school districts.

DATA REQUEST

179. The school proposals noted above are part of the development plans for the Signature Properties/Westpark Associates residential communities.

    a. Please provide any information as to discussions with the Department of Education and/or the Roseville School District associated with the placement of potential hazardous facilities (i.e., gas line placement, on-site hazardous materials), within close proximity of the proposed schools.

    b. Please provide a response (i.e., air emissions and wind direction data, and linear facility and hazardous material delivery routes) to a December 7,2001 letter from the Department of Education to staff at the two school districts. This letter has been posted on the Commission's website for the Roseville Energy Facility.

    c. In your response, discuss your actions to date, if any, and your plans on how you will address the schools' concerns prior to project certification.

Technical Area: Noise
Author: Jim Buntin

BACKGROUND

The noise analysis presumes that compliance with the 48 dBA criterion of the Roseville City Code (Section 9.24.070) will be sufficient to avoid a significant noise effects at affected residences. Energy Commission staff notes that the City Code was revised in 2000, and the noise standard (Section 9.24.100) is now the same as in Implementation Measure 8 of the Noise Element of the City of Roseville General Plan, which establishes a nighttime residential noise standard of 45 dBA L_{eq}. The noise analysis indicates correctly that the noise standard applied by Placer County for residential uses adjacent to industrial uses is 54 dBA L_{eq}. These standards comprise the LORS for power plant operational noise.

The applicant's data indicates that meeting the City of Roseville 45 dBA criterion would result in an increase over ambient noise levels of about 10 dBA, based upon the L_{90} values measured at Site LT-2 during the quietest hours of the day and night. In Placer County, the allowable noise level of 54 dBA would result in an increase over ambient noise levels of about 20 dBA, based upon the L_{90} values measured at Sites LT-3 and LT-4 during the quietest hours of the day and night. (These sites are presumed to be at residences, though the Application for Certification (AFC) is not clear on this point.

In both situations, power plant operational noise will result in a substantial change in background noise levels. The Energy Commission staff has concluded that a potential for a significant noise impact exists where the noise of the project plus the background exceeds the background by 5 dBA L_{90} or more at the nearest noise-sensitive location. In accordance with CEQA, the predicted change in background noise levels must be addressed, and mitigated if found to be significant.

Energy Commission staff notes, however, that development of the West Roseville Specific Plan, should it occur before the project is built, will cause increases in ambient noise levels, primarily due to increased area traffic. Therefore, one may expect that the resulting changes in ambient noise levels will affect any conclusions about the significance of the noise levels produced by the power plant.

DATA REQUEST

180. Please clarify the locations of the long-term noise monitoring sites by listing the site addresses and owners' names. Include a statement of whether the residence is in the City of Roseville, or in Placer County.

181. Please revise Tables 5.12-3A and 5.12-3B to reflect the need for compliance with the City of Roseville 45 dBA standard, and show the predicted changes in noise levels for comparison to the CEC 5 dBA L_{90} threshold for potential significance.

182. Please provide an acoustical analysis addressing the potential for development of the West Roseville Specific Plan to affect the ambient noise levels at the nearest sensitive receptor locations. Include an estimate of the ambient noise levels after the Specific Plan is fully developed, and provide conclusions regarding the potential significance of project noise levels at those locations.

183. Please provide predicted project noise levels at the park and school sites presently described by the proposed West Roseville Specific Plan, including estimates of the noise impacts resulting from power plant noise levels at those locations.

BACKGROUND

The Energy Commission regulations (CCR Title 20) require that a map be provided showing the area where there is a potential increase of 5 dBA or more, during either construction or operation, over existing background levels.

DATA REQUEST

184. Please provide a map or a listing showing the sensitive receptors that are predicted to be exposed to construction noise levels exceeding the typical daytime ambient L_{90} values by 5 dBA.

185. Please revise Figures 5.12-3 and 5.12-4 to show the sensitive receptors that are predicted to be exposed to plant operation noise levels exceeding the typical nighttime ambient L_{90} values by 5 dBA.

BACKGROUND

The AFC does not indicate whether pile driving will be required. Energy Commission staff is concerned that, if pile driving is found to be necessary, adequate analysis should be provided to ensure that there will be no significant noise or vibration effects.

DATA REQUEST

186. Please state whether pile driving is anticipated. If so, provide a description of potential locations for pile driving, their proximity to residences, and quantification of whether adverse noise or vibration effects are expected.

BACKGROUND

The initial start-up of a combined-cycle power plant typically includes steam pipe cleaning by means of "steam blows." No specific discussion of the noise effects of this specific practice was provided in the AFC, although a mitigation measure was proposed.

DATA REQUEST

187. Please provide a discussion of the potential noise effects associated with steam blows for the proposed project at the nearest sensitive receptors. Include estimates of high- and low-pressure steam (or air) blow noise levels, their effects, and any proposed mitigation measures. State whether low-pressure cleaning methods have been considered, and whether it will appears practical to implement quiet blow technology for this project.

BACKGROUND

The City of Roseville is currently building a waste water treatment plant adjacent to the proposed power plant. Certain noise sources may be associated with the operation of the waste water treatment plant, such as fans and generators. These sources may have been described in the environmental documentation prepared for the waste water treatment plant. The AFC does not include a discussion of the noise levels expected from the waste water treatment plant, nor their cumulative effects at the nearest receptors.

DATA REQUEST

188. Please provide a discussion of the potential noise effects associated with the waste water treatment plant at the nearest sensitive receptors. Include estimates of waste water treatment plant noise levels, their cumulative effects on noise levels due to the power plant, and any proposed mitigation measures if the cumulative noise effects are significant.

Technical Area: Transmission System Engineering
Author: Laiping Ngand Al McCuen

BACKGROUND

The applicant's response to staff's Data Request 81 for the Transmission System Engineering discipline contained a Western Area Power Administration System (Western) Impact Study Report, dated November 12, 2001, received by staff on January 25, 2002. Staff had requested a System Impact Study demonstrating conformance or non-conformance with reliability criteria and the **identification of required mitigation measures** necessary to maintain reliability criteria. Staff is concerned that the report does not clearly indicate the measures the applicant accepts as necessary to reliably interconnect the project nor does it--or supplemental information--indicate the "whole of the action" that is the full build-out of facilities. The uncertainty of what constitutes the "project" and the analysis of environmental impacts and mitigation could have significant impacts on the process schedule. Pages 1,2 and 3 of the subject Study Report indicate that transmission reconfigurations, new transmission lines and transmission line upgrades are required to make the project "feasible". For staff to provide an independent and timely analysis of the "project" the following information is needed.

DATA REQUEST

189. Please verify that the facilities proposed by the applicant are as stated in the report. Discuss the status of negotiations between Western and the applicant and the position of both, and identify when a **final** list of required mitigation measures to approve the interconnection of the project will be available.

190. If sensitivity or other studies are being developed from the System Impact Study Report, please provide such studies or indicate a schedule for submittal to the Commission.

191. For each new, reconfigured, or upgraded line or substation modification identified in, provide an engineering description (type, size and capacity), construction methods, playout and take in sites, laydown sites, availability of access roads, route maps identifying impediments to construction and sensitive environmental areas, the environmental setting,

192. Environmental impacts, and mitigation measures for all routes and modifications. This required information must be at the same level of scope and detail as that provided for previously identified project facilities.